

Remarks

Discussion regarding rejection under 35 USC 102(e) as being anticipated by Appa US Patent No. 6,492,743.

The Appa patent involves three innovations: (1) Counter Rotating Rotors to extract increased amounts of power from the wind, (2) Thrusters in lieu of auxiliary gas turbine to complement wind power (in low wind conditions), and (3) Centrifugal fan or accelerator to compress hot air from a heat exchanger for injection into said thruster for combustion. These innovations do not resemble or "anticipate" the apparatus defined in my patent application 20030011197. Said apparatus employs centrifugal weights to control/change inertial forces to maintain desired operating speed on the low speed shaft as wind (or water) speeds increase or diminish.

Remarks

Discussion regarding rejection of Claim 1 under 35 U.S.C. 102b as being anticipated by Holland, Jr. U.S. 4,582,013.

The Holland patent 4,582,013 employs weights and jackscrews (41 & 44) to "decrease the angle of attack of airfoil 2" or "increase the angle of attack when the weights are drawn close to each other". Further, weights and jackscrews (52 & 51) "may similarly be used to control the centrifugal moments of the blade" (see column 38 lines 60 through 68 and column 39 lines 1 through 20).

These weights and jackscrews are employed to change the pitch of the blade in changing winds for RPM control.

The Holland apparatus is a single blade design requiring a counter balance. The discussed weights are components of stub (sheet 3 figure 9 part 19) that also serves as a necessary counterbalance. Holland is careful to position weights and jackscrews in a manner and direction (see sheet 3 – figures 9,12,13,15) that maintains balance critical in a one-blade design. If said weights were moved on their jackscrews in a direction away from (or closer to) the axis of the low speed shaft to control speed and rolling torque.. a significant imbalance would result and disaster would soon follow.

The Holland apparatus does not deliver increasing torque in increasing winds and, accordingly, does not bring into play additional generators.

Weights and jackscrews in Holland apparatus do not directly control rpm's. They control pitch that in turn controls rpm's.

With Holland apparatus rolling torque on the low speed shaft does not increase as wind speeds increase.

The apparatus in application 10/091,088 directly controls rpm's by moving weights along their jackscrews. This movement is in lieu of "pitch" to control rpm's.

Weights and jackscrews employed in application 10/091,088 are: 1) downwind and independent of blade assembly; 2) moved synchronously closer to or further from axis of low speed shaft exclusively to control a centrifugal (inertial) force that in turn controls RPM; 3) not employed to change angle of attack on rotor blade or blades; 4) not employed as a counterbalance in a one-blade design.

Holland 4,582,013 does not anticipate or describe the apparatus found in application 10/091,088.

Discussion regarding rejection of Claims 2 & 3 under 35 U.S.C. 103(a) as being unpatentable over Holland, Jr. U.S. 4,582,013 in view of Lund U.S. Patent No. 4,585,950.

Given that Holland does not anticipate claim 1, rejection of claims 2 and 3 cannot be sustained. Further, the Lund patent 4,585,950 is an electrical solution (not mechanical) for turning multiple generators as an increasing wind permits while maintaining desired rpm's for a 60-cycle requirement. Would this not have been a competing (not complementary) solution? The Lund solution for turning multiple generators is not compatible or complementary to a centrifugal weight scheme that maintains rpm's while increasing rolling torque on the low speed shaft.